

Having thus described my invention, what is claimed is:

- 1) A rear view monitoring system for a motor vehicle having a longitudinal center axis and passenger compartment symmetrically centered upon said axis and bounded by front and rear, left side and right side portions of the vehicle, a front windshield, a roof, and upwardly directed roof-supporting pillars, said monitoring system comprising:
 - a) first and second rear view side video assemblies installable on opposite sides of the front portion of said vehicle and positioned and configured to produce mirror images of rearward areas contiguous to the left and right sides of the vehicle, respectively,
 - b) a third video assembly installable upon the rear of said vehicle and configured to produce a mirror image of an area behind said vehicle, and
 - c) first, second and third monitor screens of substantially rectangular contour located within said compartment and separately interactive with said first, second and third video assemblies, respectively, to provide visually observable pictures corresponding to said mirror images, said first and second screens being positioned adjacent pillars on the same side of the compartment as the associated video assemblies, and said third screen being centered high upon said front windshield.
- 25 2) The monitoring system of claim 1 wherein said video assemblies are comprised of an optical lens capable of gathering light at a particular viewing angle to produce a focused image, a

camera body capable of converting said image to an electronic signal amenable to alteration and transmission via electrical conductors, and means for reversing said image to produce a mirror image.

- 5 3) The monitoring device of claim 2 wherein said image reversing means is a rearwardly directed mirror positioned in front of said lens which is forwardly directed.
- 10 4) The monitoring system of claim 2 wherein said image reversing means is electronic circuitry within said camera body, and said lens is rearwardly directed.
- 15 5) The monitoring system of claim 2 wherein the pictures on said monitor screens are of substantially equal magnification.
- 20 6) The monitoring system of claim 5 wherein the pictures on said first and second screens partially and adjustably overlap the picture on said third screen.
- 25 7) The monitoring system of claim 6 wherein the nature of said overlap is such that between 5% and 20% of the picture on said third screen, measured inwardly from the opposite lateral extremities of said third screen, repeats portions of pictures on said other two screens, said portions being closest to said axis.
- 8) The monitoring system of claim 2 wherein said lens is of adjustable zoom construction.
- 9) The monitoring system of claim 2 wherein the front portion of said vehicle terminates forwardly in a front bumper, and further comprises oppositely paired fenders.
- 10) The monitoring system of claim 9 wherein said first and second

video assemblies are installed at opposite locations within said paired fenders with minimal outward protrusion from said fenders.

11) The monitoring system of claim 10 wherein the locations of
5 said first and second video assemblies are selected such that the requisite viewing angles to properly cover areas contiguous to the sides of the vehicle match the viewing angle of said third video assembly, thereby causing said screens to show pictures of equal magnification.

10 12) The monitoring system of claim 10 wherein said first and second video assemblies are located at sites between 65% and 80% of the distance measured from said windshield toward said bumper.

15 13) The monitoring device of claim 2 wherein said image reversing means is an optical prism positioned in front of said lens which is forwardly directed.

14) The monitoring device of claim 2 wherein the viewing angle of said optical lens is between 35 and 46 degrees.

15) The monitoring device of claim 14 wherein no portion of said
20 video assemblies protrudes more than 2 inches outwardly from the vehicle.